

Range Management Planned Grazing Systems

NE Fact Sheet-5

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What

A planned grazing system involves an orderly sequence of grazing and resting grassland.

Why

Livestock are selective about the plants they eat. They tend to repeatedly graze some plants, and ignore others. This weakens the more desirable plants, and allows unwanted plants to thrive and multiply. Nearly all pastures have areas where livestock concentrate, such as around water, bedding grounds and feed ground. If the pasture is continuously used, these areas become overused, resulting in pasture deterioration.

Grazing and resting plants on grassland in a planned sequence increased the vigor of better plants, giving them a change to grow and multiply. This gradually increased the number of high quality plants per acre.

Improved grass condition increased livestock production, improves wildlife habitat, reduces soil erosion and conserves water. By resting pastures, you also allow overused areas to become productive.

How

Combining livestock from several pastures into one herd, and grazing one pasture at a time, tends to disperse cattle. This improves grazing distribution in the pasture, and provides a rest period for the pasture when the cattle are in a different pasture.

Kinds of Systems

Planned grazing systems vary from unit to unit, depending on the type of livestock, kind of pasture and the objectives of the operator. Listed below are some commonly used systems.

Two-pasture, one-herd. With this system, a herd is rotated between two pastures. Each year, pastures are rested during a different part of the growing season to benefit the entire plant community. This system takes advantage of the various growth periods of the more desirable plants.

Three-pasture or four-pasture, one-herd. These systems are similar to the two-pasture, one herd system, except that the herd is moved through more pastures. Grazing and rest periods vary with three-pasture and four-pasture systems, depending on the producer's objective and the time of year. The length of each grazing period may be as short as 10 days or as long as 120 days. With some three-pasture systems, livestock are moved every four months. With some four-pasture systems, they are moved every three months. With some three-pasture and four-pasture systems, livestock are rotated through each pasture two or more times during the year.

Merrill-four pasture. With this system, three herds of livestock graze three pastures while a fourth pasture is rested. About every four months, one herd is moved to the rested pasture and the pasture they were in is rested. Each pasture is grazed 12 months, then rested four months.

High-intensity, low frequency. With this technique, one herd of livestock grazes eight or more pastures in a planned sequence. Livestock are moved into one pasture and the other pastures are rested. When the forage is grazed to the desired intensity, livestock are moved to the next pasture in the rotation. Livestock typically stay in a pasture 10 to 25 days. The frequent moves allow long rest periods for each pasture. This system greatly improves grassland condition, but individual livestock performance may decline.

Short-duration. (Management Intensive Grazing.) This is similar to the high-intensity, low frequency system, except the speed of the rotation is adjusted according to the growth rate and the required rest period of the plants. During the peak of the growing season, livestock are moved rapidly – every three to five days – with slower moves when pasture growth rate slow down. A grazing cycle is completed every 25 to 60 days. With cool season grasses the cycle is 25 to 30 days and with warm season natives the cycle is 45 to

60 days. When the system is operated properly, good livestock performance and good grassland improvement results.

Cell-grazing. This is a form of short-duration grazing, but usually with 12 or more pastures in a cell. In cell grazing, the same basic principles of short-duration grazing are used. It often used a design of radiating fences to facilitate the movement of livestock. In these cases, water usually is located in the center of the cell, and fences radiate out from the center, forming pastures. Because livestock come to the center daily for water and minerals, they should be moved between pastures away from the center to encourage better distribution of grazing. Producers with cell grazing usually use electric fences to reduce fencing costs.

The Best System

The best system, or systems, may depend on present pasture and topography, available water supplies, economics, grass conditions, kinds and classes of livestock, long-range goals for grassland improvement and the time necessary to supervise the operation. The point is, pasture greatly benefits from the graze/rest sequences of properly managed grazing systems.

Where to Get Help

For more information on rangeland management, contact the local office of the U.S. Department of Agriculture's Natural Resources Conservation Service. NRCS personnel give technical assistance to landowners and operators through local natural resource districts.